

### **Remarks**

Claims 11-25 were pending. Claims 1-10 were canceled. Claims 11, 12, and 19 are currently amended with support noted below. New claims 26-28 have been added to depend from claims 11, 12, and 19 to further describe the range of the metal hydrate in the respective adhesive sheets. Support for this amendment can be found, for example, on page 5, lines 5-10 of the instant specification. Reconsideration of the application with amended and added claims respectfully is requested.

### **§ 112 Rejections**

Claim 11 stands rejected under 35 USC § 112, second paragraph, as purportedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More particularly, the Examiner stated that there was no structure set forth in this claim, with the end result that the various four separate components, all of which are believed to be ingredients or additives of the pressure sensitive adhesive layer, can instead be components of the adhesive layer, backing layer, or an additional structural element not set forth, and as a result the Examiner found the claim vague, indefinite, and confusing.

Claim 11 is amended for clarity by adding that the adhesive sheet or tape has a base material (see, e.g., page 11, line 24 of the specification for support) and that a halogen free flame retardant-containing pressure-sensitive adhesive is disposed on the base material. The adhesive sheet or tape comprises an acrylic polymer containing units derived from an alkyl(meth)acrylate monomer, a nitrogen-containing monomer and a carboxyl group-containing monomer; and a metal hydrate compound, wherein the nitrogen-containing monomer and the carboxyl group-containing monomer are copolymerized with the alkyl(meth)acrylate monomer. Support for this amendment is found in the specification as filed, for example, on page 9, lines 10-22.

In summary, Applicant submits that the rejection of claim 11 under 35 USC § 112, second paragraph, has been overcome, and that the rejection should be withdrawn.

Claims 11-25 stand rejected under 35 USC § 112, first paragraph, as purportedly based on a disclosure which is not enabling. More particularly, the Examiner stated that Applicant's specification teaches 1) (e.g., the Abstract) that the adhesive composition must not contain a

halogen based flame retardant, 2) that there should be at least broad ranges of proportions of the various ingredients (see, e.g., page 9), and 3) that there should be some sort of basic tape or sheet structure recited, such as the presence of a suitable sheet or backing, each of these limitations which are believed to be needed for the practice of the invention, but not included in the claim(s), so the claims stand rejected.

Claims 11, 12 and 19 have been amended to specify that the flame retardant pressure-sensitive adhesive layer is halogen free. Support for this amendment can be found, for example, in the application as filed, beginning with the Title. Claims 11, 12, and 19 have also been amended to include at least broad ranges of proportions of the various ingredients. Claim 11 has been amended to recite a pressure-sensitive adhesive having an acrylic polymer containing units derived from a mixture consisting essentially of from 40 percent to 99 percent by weight alkyl(meth)acrylate monomer (see page 9, lines 1-9 of the specification for support), 0.5--50 percent by weight of a nitrogen-containing monomer (see page 9, lines 21-31 or support), 0.5--50 percent by weight of a carboxyl group-containing monomer (see page 9, lines 10-20 for support, and 15--400 parts by weight of a metal hydrate compound, to 100 parts by weight of the acrylic polymer (see page 5, lines 3-14 for support), is copolymerized from a first mixture comprising alkyl(meth)acrylate monomer and a nitrogen-containing monomer, and a metal hydrate compound (see page 9, lines 10, and 21 for support of copolymerization). Finally, a base layer has been added to claim 11 to provide a basic tape or sheet structure. Support for the base layer is found, for example, on page 11, lines 20-30 of the instant specification. Claims 12 and 19 analogously have been amended. Both claims have been amended to require that the pressure-sensitive adhesive layer be halogen free. Claim 12 now recites a first pressure-sensitive adhesive containing a first acrylic polymer derived from a first mixture comprising 40--97 parts by weight of an alkyl(meth)acrylate monomer, and between 3 and 50 parts by weight of a nitrogen-containing monomer. Support for this can be found, for example, on page 13, lines 10-15 of the instant specification. Claim 12 has also been amended to include a second pressure-sensitive adhesive layer containing a second acrylic polymer containing units derived from a second mixture comprising from 60 to 99 parts by weight of an alkyl(meth)acrylate monomer and from 1 to 20 parts by weight of a carboxyl-containing monomer. Support can be found, for example, on

page 14, lines 5-10 of the instant specification. Additionally the first adhesive has from 15 to 400 parts by weight of a metal hydrate compound to 100 parts by weight of the first adhesive. Support for this can be found, for example, on page 5, lines 5-10 of the instant specification. A base layer has been added to claim 12 to add structure to the claim. Claim 19 has been amended in a manner analogous to that of claim 12, while in claim 19 the first mixture comprises from 60 to 99 percent by weight of an alkyl(meth)acrylate monomer and from 1 to 20 parts by weight of a carboxyl group-containing monomer (support page 14, lines 5-10 of the specification) and from 15 to 400 parts by weight of a metal hydrate compound. Claim 19 also has been amended to recite that the second pressure-sensitive adhesive contains an acrylic polymer derived from a second mixture comprising 40 to 97 parts by weight of an alkyl(meth)acrylate monomer and 3 to 50 parts by weight of a nitrogen-containing monomer. Support is found, for example, on page 14, lines 10-30 of the instant specification.

Claims 13-18 and 20-25 depend upon claims 12 and 19 respectively. With the amendment of claims 12 and 19, this rejection should be withdrawn. In summary, Applicant submits that the rejection of claims 11-25 under 35 USC § 112, first paragraph, has been overcome, and that the rejection should be withdrawn.

### **§ 103 Rejections**

Claim 11 stands rejected under 35 USC § 103(a) as purportedly being unpatentable over Applicant's admissions on page 2 of the specification concerning JP Unexamined Pat. Pub. 11-269438 (Hirosuke et al.). Applicant respectfully traverses this rejection.

Claim 11 has been amended as discussed above under the § 112 rejection sections. The amended claim 1 requires a pressure-sensitive adhesive having an acrylic polymer containing units derived from a mixture consisting essentially of amounts of an alkyl(meth)acrylate monomer, a nitrogen-containing monomer, and a carboxyl group-containing monomer. The Examiner has not shown how Hirotsuke describes, teaches, or suggests teach all of the elements of amended claim 11. Furthermore, Examiner has not shown how Hirotsuke describes, teaches, or suggests a mixture consisting essentially of the ingredients now specified in the amended claim. For at least these reasons, the rejection of claim 11 under USC § 103(a) as purportedly

being unpatentable over Applicant's admissions on page 2 of the specification concerning JP Unexamined Pat. Pub. 11-269438 (Hirosuke) has been overcome and amended claim 11 should now be in condition for allowance.

New claims 26-28 depend from claims 11, 12, and 19, respectively, and further specify the range of metal hydrate. Because claims 11, 12, and 19 now are patentable as described above, new claims 26-28 also should be allowed.


#### **Other Prior Art**

The Examiner also cited that Ishiguro et al. (US-2003/0175512) and Muta et al. (US-2001/0008689) and EP 0429027A1 as pertinent to Applicant's disclosure. Applicant's agree that none of these references alone or in combination describe, teach, or suggest Applicant's invention.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application as amended respectfully is requested.

Respectfully submitted,

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Date

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